

WHAT IS CLAIMED IS:

1. A method of controlling levels of access permission,
 implemented in a system in which any of plural levels of access permission
 that define limits of information available is assigned to each user so that
 5 when a user authorized to have access makes a request for the access, the
 user is permitted to access information within the limits of the access
 permission level, said method comprising the steps of:

detecting, on the basis of user's history of access requests, the
 extent of user's interest in the information to be provided and/or changes
 10 in the interest; and

allowing the level of access permission currently assigned to the
 user to be changed to another level according to the detected extent of
 user's interest and/or changes in the interest.

2. The method according to claim 1, further comprising the steps
 15 of:

holding identification information settable by each user for
 identifying the user; and

asking the user as the source of an access request to input the
 identification information so as to define such a permission condition that
 20 the user is normally identified using the identification information, wherein
 said detection step has detection of the extent of user's interest
 and/or changes in the interest on the basis of user's history after the last
 setting of the identification information.

3. The method according to claim 2, further comprising the step of
 25 asking the user as the source of the access request to update the
 identification information when the detected extent of user's interest

and/or changes in the interest meet predetermined conditions.

4. The method according to claim 3, further comprising the step of changing the level of access permission currently assigned to the user as the source of the access request to a level narrower in scope than that defined by the current level when the identification information has not been updated.

5. The method according to claim 2, further comprising the step of asking the user as the source of the access request to update the identification information when the detected extent of user's interest and/or changes in the interest show that the number of times access is requested exceeds a predetermined number of times.

6. The method according to claim 5, further comprising the step of changing the level of access permission currently assigned to the user as the source of the access request to a level narrower in scope than that defined by the current level when the identification information has not been updated.

7. The method according to any one of claim 1, further comprising the steps of:

assigning each user, in exchange for entries of information related to the user, identification information for identifying the user and a level of access permission defined according to the contents of the information entered; and

asking the user as the source of an access request to input the identification information assigned so as to define an access condition that the user is normally identified using the input identification information, wherein

said detection step has detection of the extent of user's interest and/or changes in the interest on the basis of user's history after the last setting of the identification information.

8. The method according to claim 7, further comprising the step of
5 asking the user as the source of the access request to enter user's information again when the detected extent of user's interest and/or changes in the interest meet predetermined conditions.

9. The method according to claim 8, further comprising the step of
10 changing the level of access permission currently assigned to the user as the source of the access request to a level narrower in scope than that defined by the current level when the user has not entered user's information in response to said step of asking the user to enter the information again.

10. The method according to claim 8, further comprising the step
15 of deleting the identification information assigned to the user when the user has not entered user's information in response to said step of asking the user to enter the information again.

11. The method according to claim 7, further comprising the step
20 of asking the user as the source of the access request to enter user's information again when the detection result of the extent of user's interest and/or changes in the interest show that a predetermined number of days have elapsed since the last access request.

12. The method according to claim 11, further comprising the step
25 of changing the level of access permission currently assigned to the user as the source of the access request to a level narrower in scope than that defined by the current level when the user has not entered user's

information in response to said step of urging the user to enter the information again.

13. The method according to claim 11, further comprising the step of deleting the identification information assigned to the user when the user has not entered user's information in response to said step of asking the user to enter the information again.

14. A method of controlling levels of access permission, implemented in a system in which any of plural levels of access permission that define limits of one or more apparatuses available is assigned to each user so that when a user authorized to have access makes a request for the access, the user is permitted to use the one or more apparatuses within the limits of the access permission level, said method comprising the steps of:

detecting, on the basis of user's history of access requests, the extent of user's interest in the one or more apparatuses to be used and/or changes in the interest; and

allowing the level of access permission currently assigned to the user to be changed to another level according to the detected extent of user's interest and/or changes in the interest.

15. A method of controlling levels of access permission, implemented in a computer system for providing digital information to add a processing function as needed to a terminal operated by a user, in which any of plural levels of access permission that define limits of digital information accessible is assigned to each user so that when a user authorized to have access makes a request for the access, the user is permitted to access the digital information within the limits of the access permission level, said method comprising the steps of:

detecting, on the basis of user's history of access requests, the extent of user's interest in the digital information to be provided and/or changes in the interest; and

allowing the level of access permission currently assigned to the user to be changed to another level according to the detected extent of user's interest and/or changes in the interest.

16. An apparatus for controlling levels of access permission, applied to a computer system in which any of plural levels of access permission that define limits of information available is assigned to each user so that when a user authorized to have access makes a request for the access, the user is permitted to access information within the limits of the access permission level; said apparatus comprising: means for monitoring, on the basis of user's history of access requests, the extent of user's interest in the information to be provided and/or changes in the interest; and

means for allowing the level of access permission currently assigned to the user to be changed to another level according to the detected extent of user's interest and/or changes in the interest.

17. An apparatus for controlling levels of access permission, applied to a computer system in which any of plural levels of access permission that define limits of one or more apparatuses available is assigned to each user so that when a user authorized to have access makes a request for the access, the user is permitted to use the one or more apparatuses within the limits of the access permission level, said apparatus comprising: means for monitoring, on the basis of user's history of access requests, the extent of user's interest in the one or more

apparatuses to be used and/or changes in the interest; and

means for allowing the level of access permission currently assigned to the user to be changed to another level according to the detected extent of user's interest and/or changes in the interest.

- 5 18. An apparatus for controlling levels of access permission, applied to a computer system for providing digital information to add a processing function as needed to a terminal operated by a user, in which any of plural levels of access permission that define limits of digital information available is assigned to each user so that when a user
- 10 authorized to have access makes a request for the access, the user is permitted to access the digital information within the limits of the access permission level, said apparatus comprising: means for monitoring, on the basis of user's history of access requests, the extent of user's interest in the digital information to be provided and/or changes in the interest; and
- 15 means for allowing the level of access permission currently assigned to the user to be changed to another level according to the detected extent of user's interest and/or changes in the interest.